

AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of evaluating performance of a test environment and an actual electronic device during testing of the actual electronic device, said method comprising:

creating a virtual test environment emulating an actual test environment in which the actual electronic device is to be tested, wherein the actual test environment is meant to emulate the actual electronic device in an environment the actual electronic device might ordinarily be used;

implanting a virtual device emulating the actual electronic device into the virtual test environment;

stimulating the virtual device with an input test signal emulating an actual input signal to be applied to the actual electronic device during testing;

determining, in the virtual test environment, an indication of a signal transmission time of the actual electronic device in the actual test environment;

determining, in the virtual test environment, an indication of a signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used; and

Appln. Serial No. 09/820,896
Reply to non-final Office Action mailed on August 16, 2004

evaluating the integrity of the input test signal and a resulting output signal from the virtual device based on the determined indication of the signal transmission time of the actual electronic device in the actual test environment and the determined indication of the signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used.

2. (Original) A method as claimed in claim 1, further comprising performing a virtual calibration of the virtual test environment.

3. (Original) A method as claimed in claim 2, further comprising improving the virtual calibration based on the evaluation.

4. (Original) A method as claimed in claim 1, further comprising performing a virtual adjustment of the virtual device based on the evaluation.

5. (Currently amended) A method as claimed in claim 1, further comprising improving the design of the actual electronic device based on the environment evaluation.

6. (Currently amended) An article, comprising a storage medium having instructions stored thereon, the instructions when executed evaluating performance of a test environment and of an actual electronic device during testing of the actual electronic device by creating a virtual test environment emulating an actual test environment in which the electronic device is to be

Appln. Serial No. 09/820,896
Reply to non-final Office Action mailed on August 16, 2004

tested, wherein the actual test environment is meant to emulate the actual electronic device in an environment the actual electronic device might ordinarily be used; implanting a virtual device emulating the actual electronic device into the virtual test environment; stimulating the virtual device with an input test signal emulating an actual input signal to be applied to the actual electronic device during testing; determining, in the virtual test environment, an indication of a signal transmission time of the actual electronic device in the actual test environment; determining, in the virtual test environment, an indication of a signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used; and evaluating the integrity of the input test signal and a resulting output signal from the virtual device based on the determined indication of the signal transmission time of the actual electronic device in the actual test environment and the determined indication of the signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used.

7. (Original) An article as claimed in claim 6, wherein the instructions when executed additionally perform a virtual calibration of the virtual test environment.

8. (Original) An article as claimed in claim 7, wherein the instructions when executed additionally improve the virtual calibration based on the evaluation.

9. (Original) An article as claimed in claim 6, wherein the instructions when executed additionally perform a virtual adjustment of the virtual device based on the evaluation.

10. (Original) An article as claimed in claim 6, wherein the instructions when executed additionally improve the design of the actual device based on the evaluation.

11. (Currently amended) Apparatus for evaluating the performance of a test environment and of an actual electronic device, said apparatus comprising:

a virtual device emulating the actual electronic device;

a virtual test environment, emulating an actual test environment in which the actual electronic device is to be tested, to apply to said virtual device an input test signal emulating an actual input signal to be applied to the actual electronic device during testing, wherein the actual test environment is meant to emulate the actual electronic device in an environment the actual electronic device might ordinarily be used;

and virtual timing circuitry to determine an indication of a signal transmission time of the actual electronic device in the actual test environment and to determine an indication of a signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used, wherein the determined indication of the signal transmission time of the actual electronic device in the actual test environment and the determined indication of the signal transmission time of the actual electronic device in the environment the actual electronic device might ordinarily be used are used to evaluate the integrity of the input test signal and a resulting output signal from the virtual device.

12. (Original) Apparatus as claimed in claim 11, wherein said virtual test environment

Appln. Serial No. 09/820,896
Reply to non-final Office Action mailed on August 16, 2004

emulates a general purpose tester and a tester interface unit specific to the electronic device.

13. (Currently amended) Apparatus as claimed in claim 12, wherein said virtual timing circuitry comprises a first timer to determine the time interval between output of the input test signal by said virtual test environment and receipt of the output test signal by said virtual test environment, and a second timer to determine the time interval between receipt of the input test signal by said virtual device and output of the output test signal by said virtual device.

14. (Original) Apparatus as claimed in claim 11, wherein said virtual test environment comprises a virtual test driver to apply the input test signal to said virtual device, and a virtual test receiver to receive the output test signal from said virtual device.

15. (Currently amended) Apparatus as claimed in claim 14, wherein said virtual timing circuitry comprises a first timer to determine the time interval between output of the input test signal by said virtual test driver and receipt of the output test signal by said virtual test receiver, and a second timer to determine the time interval between receipt of the input test signal by said virtual device and output of the output test signal by said virtual device.

16. (Currently amended) Apparatus as claimed in claim 14, wherein said virtual timing circuitry comprises a first timer to determine the time interval between output of the input test signal by said virtual test environment and receipt of the output test signal by said virtual test environment, and a second timer to determine the time interval between receipt of the input

Appln. Serial No. 09/820,896
Reply to non-final Office Action mailed on August 16, 2004

test signal by said virtual device and output of the output test signal by said virtual device.

17. (Original) Apparatus as claimed in claim 11, comprising a general purpose processing system.